

CLAIMS

1. System that may be used to execute a memory operation, the system comprising:
an input/output (I/O) controller that may receive, from a data exchanging device
5 external to the system, data and a request to store the data in the system, the controller
including memory for initially storing the data in the controller when the controller
receives the data from the data exchanging device;

a first memory board that may store, in response to a first memory storage request
provided by the controller, a first copy of the data initially stored in the controller, the
10 first memory board being configured to provide to the controller a first status indication
that may indicate whether the first memory board successfully stored the first copy;

a second memory board that may store, in response to receipt by the second
memory board of a second memory storage request from the controller, a second copy of
the data initially stored in the controller, the second memory board being configured to
15 provide to the controller a second status indication that may indicate whether the second
board successfully stored the second copy; and

the controller also being configured to provide to the data exchanging device a
third status indication, the third status indication being provided to the data exchanging
device prior to receipt by the controller of the second status indication, the third status
20 indication indicating whether the system successfully stored the data in the system.

2. The system of claim 1, wherein the controller is configured to provide the first memory storage request concurrently with receipt by the controller of the data and the request to store the data in the system.

5 3. The system of claim 1, wherein the first memory storage request and the second memory storage request are provided concurrently by the controller.

4. The system of claim 1, wherein the controller provides the first memory storage request prior to providing the second memory storage request.

10 5. The system of claim 4, wherein the first memory board is selected by the controller based, at least in part, upon whether the first memory board is presently involved in another memory operation.

15 6. Method of using a system that may be used to execute a memory operation, the system including an I/O controller, a first memory board, and a second memory board, the method comprising:

receiving at the input/output (I/O) controller, from a data exchanging device external to the system, data and a request to store the data in the system, the controller
20 including memory for initially storing the data in the controller when the controller receives the data from the data exchanging device;

storing in the first memory board, in response to a first memory storage request provided by the controller, a first copy of the data initially stored in the controller, the

first-memory board being configured to provide to the controller a first status indication that may indicate whether the first memory board successfully stored the first copy;

storing in the second memory board, in response to receipt by the second memory board of a second memory storage request from the controller, a second copy of the data
5 initially stored in the controller, the second memory board being configured to provide to the controller a second status indication that may indicate whether the second memory board successfully stored the second copy; and

providing from the controller to the data exchanging device a third status indication, the third status indication being provided to the data exchanging device prior
10 to the receipt by the controller of the second status indication, the third status indication indicating whether the system successfully stored the data in the system.

7. The method of claim 6, wherein the controller is configured to provide the first memory storage request concurrently with receipt by the controller of the data and the
15 request to store the data in the system.

8. The method of claim 6, wherein the first memory storage request and the second memory storage request are provided concurrently by the controller.

20 9. The method of claim 6, wherein the controller provides the first memory storage request prior to providing the second memory storage request.

10. The method of claim 9, wherein the first memory board is selected by the controller based, at least in part, upon whether the first memory board is presently involved in another memory operation.

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